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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/754,551

01/12/2004

Hitoshi Yamakado

118314

9282

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04/18/2005

OLIFF & BERRIDGE, PLC

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ALEXANDRIA, VA 22320

EXAMINER

GARLAND, STEVEN R

ART UNIT

PAPER NUMBER

2125

DATE MAILED: 04/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/754,551

Applicant(s)

YAMAKADO ET AL.

Examiner

Steven R. Garland

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/12/04, 6/15/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/12/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3 and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 3, line 3, it is unclear whether the step counts time or disassembly operations. Claim 4 has a similar problem.

Claim 3, line 6, "the time for disassembling operation" lacks a proper antecedent basis. Claim 4 has a similar problem.

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 4 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 4 is directed to a computer program which not physically embodied in a computer readable media and as such is regarded as descriptive matter. See MPEP 2106 It is suggested that claim 4, line 1 be amended by inserting -- A computer readable media encoded with a -- before "program" and deleting "A" in the first line to avoid this rejection.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arimoto et al. 5,586,022.

Arimoto et al. teaches planning for disassembly and recycling (abstract) ; use of standard times (col. 4, lines 49-60; col. 20, lines 17-45) ; determining time (col. 20, lines 35-45) ; comparing the time to a standard time to determine the degree of difficulty or easiness and based on this determination performing a modification if difficulty is encountered (col. 15, lines 15-63). Arimoto also teaches the use of a computer and software to perform the method (col. 9, line 42 to col. 10, line 8), and weight based analysis (col. 18, lines 24-43); See the abstract; figures; col. 3, line 55 to col. 5, line 27; col. 5, lines 60-67; col. 9, line 42 to col. 10, line 65; col.11, lines 58-62; col. 12, lines 60-62; col. 14, lines 21-23; col. 15, lines 15-63; col. 16, lines 52-58; col.

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17, lines 15-62; col. 18, lines 24-43 ; col. 19, lines 43-54; col. 19, line 65 to col. 20, line 45; col. 21, lines 8-15; and the claims.

Arimoto however does not specifically state that difficult operations are "extracted", but does teach modification if an operation is difficult and performing a modification (col. 15, lines 15-63).

It would have been obvious to one of ordinary skill in the art to modify Arimoto to extract the difficult operations so that the modifications as taught by Arimoto could be performed easily on the operations which are difficult and limit having to sort through needless information about operations which are easy.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Uetake et al. 2004/0143355 ; Sato et al. 6,305,548 ; and Suzuki et al. 5,965,858 are all of interest in recycling.

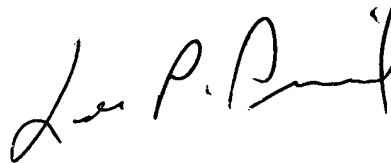
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven R. Garland whose telephone number is 571-272-3741. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

52-6
Steven R Garland
Examiner
Art Unit 2125



LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

What is claimed is:

1. A recycling analyzing system which analyzes disassembly of an item to be recycled, comprising:

a standard operation time memory which stores standard time for disassembling operation of each component beforehand;

an operation time memory which stores time for disassembling operation of each component to be disassembled;

an operation time counting unit which counts the time for disassembling operation of each component which constitutes the item to be recycled, and stores the time for disassembling operation in the operation time memory; and

a difficult operation extracting unit which refers to the standard time for disassembling operation stored in the standard operation time memory, and the time for disassembling operation of each component stored in the operation time memory, and extracts disassembling operation which is difficult.

2. The recycling analyzing system according to Claim 1, wherein the difficult operation extracting unit extracts the disassembling operation of each component which is difficult, based on a comparison between the standard time for disassembling operation and the time for disassembling operation.

3. A recycling analyzing method which analyzes disassembly of an item to be recycled, comprising:

an operation time counting step for counting disassembling operation of each component which constitutes an item to be recycled; and

a difficult operation extracting step for referring to standard time stored beforehand, and the time for disassembling operation of the each component, and extracting disassembling operation which is difficult.

4. A recycling analyzing program which analyzes disassembly of an item to be recycled, and allows a computer to execute:

an operation time counting process for counting time for disassembling operation of each component which constitutes an item to be recycled; and

a difficult operation extracting process for referring to standard time stored beforehand, and the time for disassembling operation of the each component, and extracting disassembling operation which is difficult.